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Observations of forest birds at Ol Donyo Sabuk National Park, Machakos County, Kenya

James Bradley, Simon Carter, David Guarnieri, Benson Mugambi and Darcy Ogada

Summary

A previous report recorded 19 species of forest-dependent birds in Ol Donyo Sabuk National Park. Using field surveys, literature review, and database records, we add an additional 17 forest-dependent bird species bringing the total number to 36.

Keywords Ol Donyo Sabuk, forest-dependent birds, conservation, distribution

Introduction

Munyekenye & Githiru (2010) report 19 species of forest-dependent birds (Bennun *et al.* 1996) detected on transect surveys in Ol Donyo Sabuk National Park (1°7'50" S, 37°15'35" E) in October and November 2007 (excluding Yellow-spotted Barbet *Bucanodon duchaillui*, which we treat here as unconfirmed). Following several visits to this mountain ourselves, a review of literature and author-verified database (eBird) records, and including reports forwarded to us for this paper, we provide details here of an additional seventeen species. This brings the total number of forest-dependent birds occurring at Ol Donyo Sabuk to 36 (Appendix 1). Taxonomy and nomenclature follow Bird Committee, EANHS (2009).

Species accounts

Scaly Francolin *Francolinus squamulatus*

This species, familiar to all the authors, was observed by DO on 10 May 2015. Considering an anecdotal report in June 2008, and that this secretive species is easily overlooked, it seems possible it may be resident at Ol Donyo Sabuk in small numbers.

European Honey Buzzard *Pernis apivorus*

Single birds observed on 7 January 1978 (EANHS 1979) and 21 March 1982 (EANHS OS-c 1983) appear to comprise the only records of this scarce Palaearctic raptor at Ol Donyo Sabuk. It may only occur at this site as a transiting passage migrant.

Ayres's Hawk Eagle *Aquila ayersii*

A single adult was seen well by DO on 6 March 2016 and photographed in flight (Fig. 1). The habitat in the National Park appears quite suitable for this forest raptor, yet the absence of other observations suggests it may only be a wanderer to Ol Donyo Sabuk.



Figure 1. Adult Ayres's Hawk Eagle at Ol Donyo Sabuk National Park, 6 March 2016 (photo: D. Ogada).

Mountain Buzzard *Buteo oreophilus*

A perched bird was seen well by several experienced observers, including DO, on 2 June 2012. Additional individuals were observed by DO on 10 May 2015 and 21 February 2016, and these comprise the only records at Ol Donyo Sabuk, where it may be resident.

Crowned Eagle *Stephanoaetus coronatus*

A pair was first observed displaying over high parts of the mountain on 8 April 2006 (F. Ng'weno pers. comm.). Further observations, including of pairs, were made by DO on 1 May 2009, 21 February 2016 and 6 March 2016. Combined with authors' observations of juvenile birds in immediately adjacent areas in August 2011 and November 2016, it seems this is probably a resident breeding species at Ol Donyo Sabuk.

Eastern Bronze-naped Pigeon *Columba delegorguei*

An adult male was reported by two experienced observers from just below the summit of Ol Donyo Sabuk in mid-June 2016 (W. Wachira pers. comm.). As is often the case with this species, the bird was observed in flight through a forest clearing, and the white nape was clearly seen. This pigeon is known to be an elevational migrant in nearby Nairobi, and its periodic occurrence at Ol Donyo Sabuk can be expected.

Lemon Dove *Aplopelia larvata*

A single bird was well-studied on the road at 2050 m on 24 October 2015 by JB and SC. We noted the medium size for a dove, brown colouration and contrasting white face. A second individual was heard calling the softly repeated "whoOOP" call from dense understorey nearby. This species may be only a seasonal visitor at Ol Donyo Sabuk.

African Green Pigeon *Treron calvus*

The liquid and jubilant call of this species was clearly heard from riverine figs at the base of the mountain on 23 September 2017 by DG and BM. Given the presence of numerous fruit trees at this site the omission of this widespread and common species from previous inventories of Ol Donyo Sabuk is surprising.

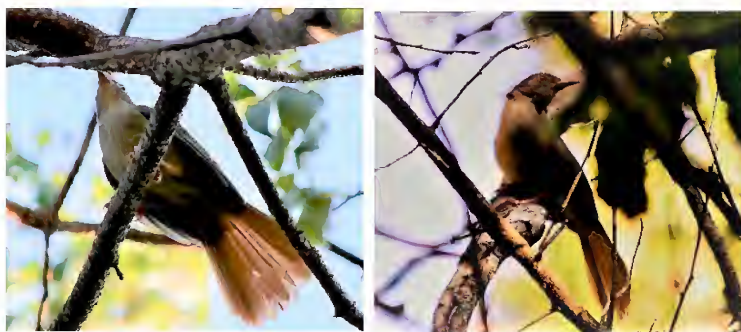


Figure 2a and b. Grey-olive Greenbul at Ol Donyo Sabuk National Park, 23 September 2017 (photos: D. Guarnieri).

Grey-olive Greenbul *Phyllastrephus cerviniventris*

Two birds were seen on 17 September 2017 by SC, DG and BM along a rocky stream bed near the base of the mountain, but it was not until 23 September that the observation was confirmed by DG and BM with audio-recordings and photographs (Figs. 2a,b). This local species is also known from nearby Fourteen Falls on the Athi River (EANHS 1978).

Green-capped Eremomela *Eremomela scotops*

Two birds seen at the base of the mountain on 27 May 1978 appears to comprise the only record of this local and scarce species at Ol Donyo Sabuk (EANHS 1979).

African Hill Babbler *Pseudoalcippe abyssinica*

A single bird was heard singing at 2050m on 24 October 2015 by JB and SC. On 17 September 2017, DG, SC and BM obtained audio recordings of another singing bird at the same location, and on 23 September 2017 an individual was photographed (Fig. 3). We believe this vocal, but skulking, species is probably resident at this site and has merely been overlooked.



Figure 3. African Hill Babbler at Ol Donyo Sabuk National Park, 23 September 2017 (photo: D. Guarnieri).

Red-capped Robin Chat *Cossypha natalensis*

Two individuals of this species were well-observed and audio-recorded near the base of the mountain on 23 September 2017 by DG and BM (Guarnieri 2017). This vocal species has been reported anecdotally from the mountain several times previously (F. Ng'weno pers. comm.), and we believe it is probably resident at this site.

African Dusky Flycatcher *Muscicapa adusta*

A single bird was seen on 17 September 2017 by SC, DG and BM, and a pair was photographed at 2000m on 23 September 2017 by DG. This species is also mapped as occurring on the mountain by Zimmerman *et al.* (1996), although the few records suggest it is only a scarce resident at most.



Figure 3. Grey Apalis at Ol Donyo Sabuk National Park, 23 September 2017 (photo: D. Guarnieri).

Grey Apalis *Apalis cinerea*

This apalis was heard singing at 2050m on 24 October 2015 by JB and SC, and was subsequently heard again on 17 September 2017 by SC, DG and BM before being photographed on 23 September 2017 (Fig. 4). The population here is currently isolated from the nearest conspecifics in Nairobi by approximately 45km, and in eastern Kenya, is the only example south of the Athi River.

Sharpe's Starling *Pholia sharpii*

A single individual reported from the mountain on 21 March 1982 (EANHS OS-c 1983) was presumably the basis for inclusion of Ol Donyo Sabuk in the range of this species by Zimmerman *et al.* (1996). Subsequent observations by DO on 2 June 2012 and 21 February 2016 suggests this species is at least a fairly regular visitor to the mountain and may possibly be resident in small numbers.

Malachite Sunbird *Nectarinia famosa*

A single non-breeding male was photographed at the summit on 15 June 2014 (Loland 2014) comprising a first record at Ol Donyo Sabuk. This species is known to be an

elevational migrant (Zimmerman *et al.* 1996), and its periodic occurrence here can be expected.

Thick-billed Seedeater *Crithagra burtoni*

A single bird was well-studied in forest near the summit on 23 September 2017 by DG and BM. We noted the heavy bill, mostly dark underside, and two buffy-white wing bars typical for the species. It appears to have been overlooked at this site, where it is probably resident.

Characterized by a rich intersection of both montane forest and sub-montane woodlands, additional surveys are likely to reveal other forest-dependent birds as yet unknown at Ol Donyo Sabuk National Park. Species reported from the mountain, but yet to be confirmed by supporting material, and which should be sought by future observers, include African Goshawk *Accipiter tachiro*, African Wood Owl *Strix woodfordii*, Trumpeter Hornbill *Bycanistes bucinator*, Eastern Nicator *Nicator gularis*, Black-throated Apalis *Apalis jacksoni* and Green-headed Sunbird *Cyanomitra verticalis*. All bird species occurring at Ol Donyo Sabuk undoubtedly benefit from the enforced protection within the boundaries of the National Park.

Acknowledgements

We would like to thank Fleur Ng'weno, Washington Wachira and Stratton Hatfield for sharing their observations from Ol Donyo Sabuk with us.

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James Bradley

7961 East Saanich Rd, Sannichton, British Columbia, V8M 1T4, Canada
Email: james_bradley@gmail.com

Simon Carter

202 Edgemont St. South, Hamilton, Ontario, L8K 2H9 Canada
Email: simonchiz@gmail.com

David Guarnieri

91 Lake Avenue, Metuchen, NJ 08840 USA
Email: dvguarnieri@mac.com

Benson Mugambi

C/o Ben's Ecological Safaris, P.O. Box 5898-00100 Nairobi, Kenya

Email: ben@bensecologicalsafaris.com

Darcy Ogada

The Peregrine Fund, 5668 Flying Hawk Lane, Boise, Idaho 83709, USA

Email: ogada.darcy@peregrinefund.org

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Appendix 1.

Forest-dependent birds occurring in Ol Donyo Sabuk National Park. The category of forest dependence applied to each species here follows Bennun *et al.* (1996).

Species	Forest Dependence	Source
Scaly Francolin <i>Francolinus squamatus</i>	generalist	author observation
European Honey Buzzard <i>Pernis apivorus</i>	generalist	EANHS 1979, EANHS OS-c 1983
Great Sparrowhawk <i>Accipiter melanoleucus</i>	generalist	Munyekenye & Githiru 2010
Mountain Buzzard <i>Buteo oreophilus</i>	generalist	author observation
Ayres's Hawk Eagle <i>Aquila ayersii</i>	generalist	author observation
Crowned Eagle <i>Stephanoaetus coronatus</i>	specialist	F. Ng'weno pers. comm.
Eastern Bronze-naped Pigeon <i>Columba delegorguei</i>	specialist	W. Wachira pers. comm.
Lemon Dove <i>Aplopelia larvata</i>	specialist	author observation
Tambourine Dove <i>Turtur tympanistria</i>	generalist	Munyekenye & Githiru 2010
African Green Pigeon <i>Treron calvus</i>	generalist	author observation
Hartlaub's Turaco <i>Tauraco hartlaubi</i>	specialist	Munyekenye & Githiru 2010
Red-chested Cuckoo <i>Cuculus solitarius</i>	generalist	Munyekenye & Githiru 2010
African Emerald Cuckoo <i>Chrysococcyx cupreus</i>	generalist	Munyekenye & Githiru 2010
Cinnamon-chested Bee-eater <i>Merops oreobates</i>	generalist	Munyekenye & Githiru 2010
Yellow-rumped Tinkerbird <i>Pogoniulus bilineatus</i>	generalist	Munyekenye & Githiru 2010
Black-backed Puffback <i>Dryoscopus cubla</i>	generalist	Munyekenye & Githiru 2010
Grey Apalis <i>Apalis cinerea</i>	specialist	author observation
Yellow-whiskered Greenbul <i>Andropadus latirostris</i>	generalist	Munyekenye & Githiru 2010
Grey-olive Greenbul <i>Phyllastrephus cerviniventris</i>	generalist	author observation
Cabanis's Greenbul <i>Phyllastrephus cabanisi</i>	specialist	Munyekenye & Githiru 2010
Green-capped Eremomela <i>Eremomela scotops</i>	generalist	EANHS 1979
Blackcap <i>Sylvia atricapilla</i>	generalist	Munyekenye & Githiru 2010
African Hill Babbler <i>Pseudoalcippe abyssinica</i>	specialist	author observation
Montane White-eye <i>Zosterops poliogastrus</i>	generalist	Munyekenye & Githiru 2010
Sharpe's Starling <i>Pholia sharpii</i>	specialist	EANHS OS-c 1983
Olive Thrush <i>Turdus olivaceus</i>	generalist	Munyekenye & Githiru 2010
Rüppell's Robin Chat <i>Cossypha semirufa</i>	generalist	Munyekenye & Githiru 2010
Red-capped Robin Chat <i>Cossypha natalensis</i>	generalist	author observation
White-eyed Slaty Flycatcher <i>Melaenornis fischeri</i>	generalist	Munyekenye & Githiru 2010
African Dusky Flycatcher <i>Muscicapa adusta</i>	generalist	author observation
Collared Sunbird <i>Hedydipna collaris</i>	generalist	Munyekenye & Githiru 2010
Malachite Sunbird <i>Nectarinia famosa</i>	generalist	Loland 2014
Eastern Double-collared Sunbird <i>Cinnyris mediocris</i>	generalist	Munyekenye & Githiru 2010
Brown-capped Weaver <i>Ploceus insignis</i>	specialist	Munyekenye & Githiru 2010
Peters's Twinspot <i>Hypargos niveoguttatus</i>	generalist	Munyekenye & Githiru 2010
Thick-billed Seedeater <i>Crithagra burtoni</i>	specialist	author observation

Nest food provisioning in the Red-capped Lark *Calandrella cinerea* does not vary with parental sex differences and time of day

Mary Mwangi, Peter Njoroge, Robert Chira and Nathan Gichuki

Summary

The Red-capped Lark *Calandrella cinerea* inhabits some of the most highly threatened grassland ecosystems in Kenya. Although previous studies have been undertaken on feeding ecology of this species, a knowledge gap still exists in relation to its nest food provisioning behaviour. We studied the food provisioning behaviour of Red-capped Larks in open grassland habitat at Kedong Ranch in Naivasha, Kenya. Observations were completed on 18 active nests for a total of 163 observation hours between 07:00 and 18:00. Results confirmed that nestling diet comprised insect larvae (including caterpillars), grasshoppers, butterflies/moths, ants and beetles. Food provisioning rates for males and females combined, as well as independently, did not vary with the nestling age. In relation to specific prey items, provisioning rates of insect larvae and butterflies/moths during different hours of the day did not vary. However, there was a significant difference in provisioning rates of grasshoppers for the time periods. The findings provide an understanding of food requirements and feeding behaviour of the Red-capped Lark, and therefore are important for predicting how future changes in the availability of food resources could influence feeding, reproductive success, and possibly survival of the species.

Keywords Kedong Ranch, lark, grassland, nestling diet, insects

Introduction

Bi-parental care, where both female and male parents participate in taking care of the nestlings, occurs in more than 90% of avian species (Gwiazda & Ledwon 2015). The availability of food for nestlings may therefore influence parental behaviour as they strive to maximize their breeding success (Robb *et al.* 2008, Pedro *et al.* 2013, Stouffer *et al.* 2013). Different roles for female and male parents are predicted by the 'division-of-labour' hypothesis (Lormee *et al.* 2005), where parent birds may show variation in the provisioning behaviour at the nest (Mainwaring *et al.* 2011). Furthermore, the amount of time allocated to feeding may be influenced by the need to increase reproductive success as well as to ensure survival (Lu & Zheng 2009).

In Kenya, the Red-capped Lark inhabits wet cool montane grasslands (2600 m) and dry/warm tropical grasslands (1200 m) (Ndithia *et al.* 2017). Although both male and female Red-capped Lark adults have streaked grey to brown upper parts, a rufous cap, red shoulders and white under-parts, males have redder plumage and a longer crest than females (Wamiti 2014, pers. obs.). Adults often begin breeding at the onset of the rains (Grizard *et al.* 2015), with the female laying two eggs in a ground-level open-cup nest, which she incubates while the male feeds her. Eggs hatch synchronously 12 d after incubation begins, and both parents feed the nestlings until they

fledge at 9–10 d. Insects are a major source of food, especially during breeding when parents are required to feed the nestlings.

Given that parental sex differences in food provisioning at the nest may exist in some avian species, this study aimed at assessing whether parental sex differences and time-of-day influenced food provisioning behaviour at the nest of Red-capped Larks.

Materials and Methods

Study area

Kedong ranch ($0^{\circ} 53' 37''$ S, $36^{\circ} 23' 54''$ E, 2077 m) is a privately-owned ranch in Naivasha that is sandwiched between two key conservation areas (Hell's Gate and Longonot National Parks) (Fig. 1). It is also adjacent to Lake Naivasha, an Important Bird Area and a Ramsar site (Bennun & Njoroge 2001). With a tropical savanna climate, the area has bimodal annual rainfall patterns with a short rainy season (October–November) and a long rainy season (March–May). Rainfall ranges from 600 to 1100 mm. The annual minimum temperature is 9.4°C and the average maximum temperature is 25.0°C .



Figure 1. A composite map showing location of the study area (source: Google Maps).

The savanna grassland ecosystem is exposed to intensive grazing by herds of wild-life and livestock. Some of threatened bird species found in the area include the endangered Grey-crested Helmeted-shrike *Prionops poliophus*, Little Grebe *Tachybaptus ruficollis*, Lesser Flamingo *Phoeniconaias minor*, Red-knobbed Coot *Fulica cristata*, and African Spoonbill *Platalea alba*. Other resident terrestrial bird species found in the area include Rufous-naped Lark *Mirafra africana*, Grassland pipit *Anthus cinnamomeus*, Cattle Egret *Bubulcus ibis*, Pectoral-patch Cisticola *Cisticola brunnescens*, Northern Anteater Chat *Myrmecocichla aethiops*, Kori Bustard *Ardeotis kori*, African Goshawk *Accipiter tachiro*, and African Fish Eagle *Haliaeetus vocifer*. The open grassland ecosystem was chosen for study because of the large population of resident Red-capped Larks and their exposure to anthropogenic activities.

Methods

This study was part of a larger ongoing project examining the breeding strategy of Red-capped Larks led by the University of Groningen, The Netherlands. The project has trapped adult larks using mist nets, identified the sex of the birds using physical

differences (males have redder plumage and a longer crest than females), then banded larks with colour rings on both legs for individual identification.

Fieldwork for this study was conducted during the breeding season, occurring over a period of 150 d between March and August 2016. Individual adult larks were identified during nest observations using a telescope from inside a movable hide (a metal frame covered with a green cloth material and tree twigs on sides for camouflage) that was placed *c.* 15 to 20 m from nests. Colour rings were used to identify the sex of the parent birds as they delivered prey to the nestlings. Accurate identification of the sex of the parents was further confirmed through observations of nestling brooding, a behaviour only observed in female parents, especially on cold or hot days. The close distance to the nest allowed for identification of different prey items delivered to the nest, including small prey items (Geng *et al.* 2009). Although this was not always easy when identifying small prey items; for example, ants were correctly identified in most cases because parents delivered many of them while lumped together in the mouth. The open nature of the grassland habitat also facilitated the correct identification of prey items. Observations were completed for nests with nestlings aged 1–8 and 10 days old after hatching. However, there was no nest with nestlings aged 9 days old available for observation. Observations were made from dawn to dusk (07:00–18:00) except in instances of unfavorable weather (drizzling, windy or raining) (Schulze *et al.* 2000). The following information was recorded: age of nestlings, time of feeding, duration of each feeding session, type of food, and sex of the parent bird.

Data analysis

Data were tested for normality using the R-QQ plot for normality and Shapiro-Wilk Test, then analysed using R-program version 3.2.1 and PAST software. Analysis was done to examine differences in provisioning behaviour in relation to nestling age, sex of the parent bird, and hour of the day (07:00–18:00) during which food was provided. An analysis of variance (ANOVA) was used to examine between-nest variation in prey composition and prey delivery rates. A Student's *t*-test was conducted to examine differences in insect prey type and food provisioning rates by male and female parents. Mean values were reported as mean \pm SE. For all statistical tests, the level of significance was set at $\alpha < 0.05$.

Results

Nestling diet composition

A total of 772 nest food provisioning observations at 18 nests (163 h of observation) was completed. All nests had two nestlings. Both parent birds provided a variety of food items that were placed into five classes: insect larvae (caterpillars and other larvae), grasshoppers, butterflies/moths, ants and small beetles. Parent birds primarily provided nestlings with more insect larvae (52% of total observations) than with grasshoppers (29% of total), butterflies/moths (16% of total), ants (2% of total) and beetles (1% of total). Although most of the time parent birds delivered a single prey item, there were instances when parents delivered two prey items at the same time. Of the total observations when the parents brought two food items ($n = 21$), 13 deliveries were by males and 8 by females. The mean delivery rate for insect larvae per nest/d was 22.7 ± 4.4 , for grasshoppers 16.0 ± 2.3 , for butterflies/moths 7.2 ± 2.0 , for ants 1.9 ± 0.4 and 0.4 ± 0.2 for beetles.

Insect prey delivery by males and females

Mean delivery rates for food items based on sex of the parent are shown in Fig. 2. Results confirmed that mean delivery rates of insect larvae by males and females did

not vary ($t_{2,17}=0.09$, $p>0.05$), nor did the provisioning rates by males and females of most individual prey items vary (Fig. 2). However, there was a significant difference in mean delivery rates of grasshoppers ($F_{10,152}=2.03$, $p<0.05$) by the males (Fig. 2).

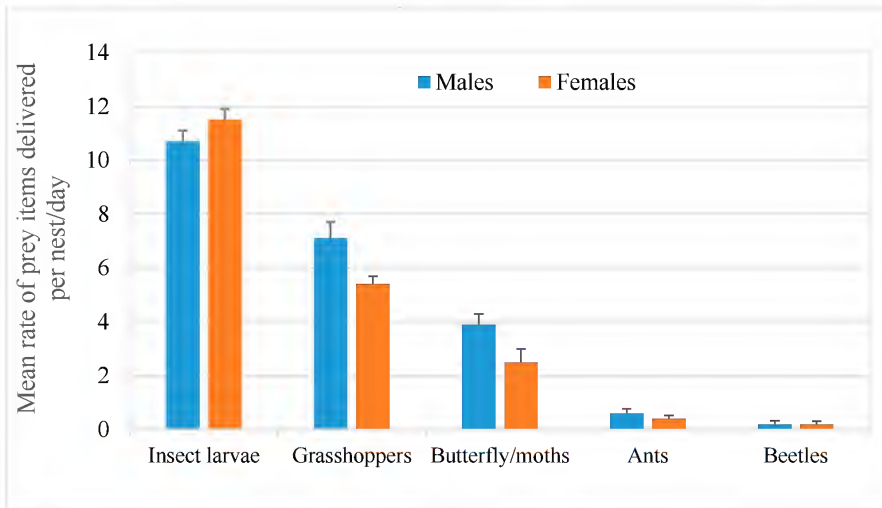


Figure 2. Mean delivery rates of food items to nestlings by males and females per nest/d ($n=18$ nests).

Nestling diet composition and variation in prey numbers between nests

Parent birds were observed to feed nestlings until they reached 10 days old, after which they fledged. Nests observed all had 2 nestlings of different ages. Diet composition and mean delivery rates of different prey items per day varied considerably between nests. The mean delivery rates of insect larvae ($F_{10,110}=11.08$, $p<0.05$), grasshoppers ($F_{10,110}=5.13$, $p<0.05$) and butterflies/ moths ($F_{10,110}=6.52$, $p<0.05$) varied with nestling age (Fig. 3). On the other hand, for males and females combined, provisioning rates for all prey items did not vary ($F_{17,72}=1.13$, $p>0.05$). While provisioning rates of insect larvae, grasshoppers and butterflies/ moths increased for nestlings aged 3–7 days old, they decreased for those aged 8 and 10 days old (Fig. 3).

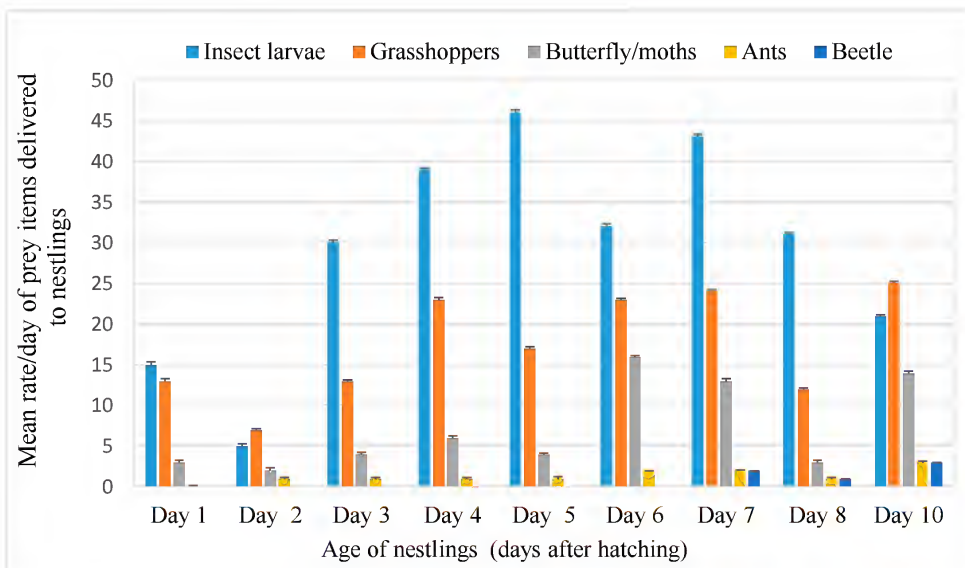
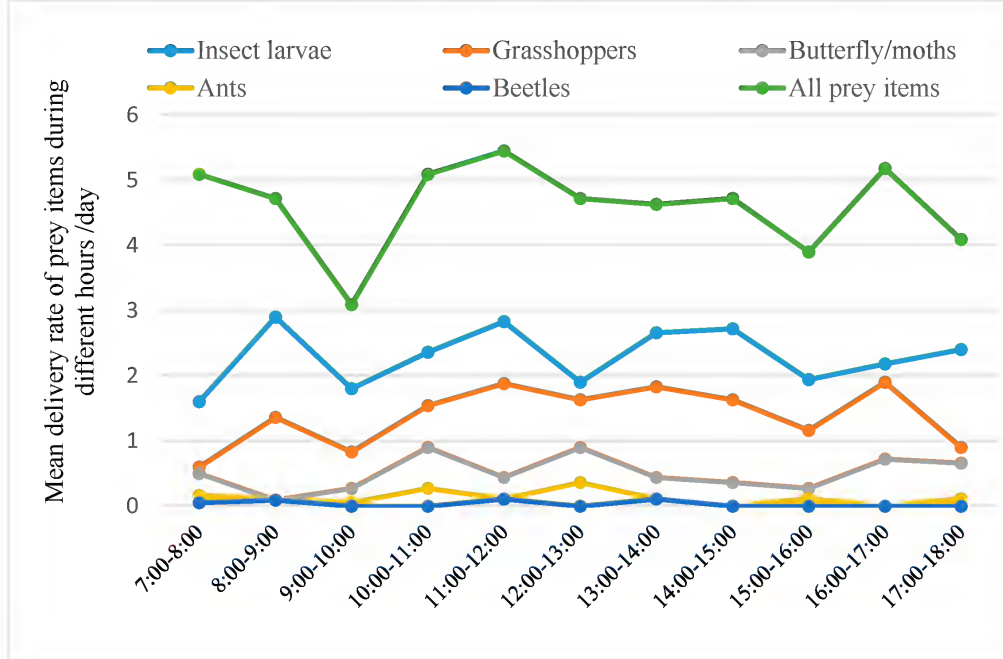


Figure 3. Mean delivery rates of prey items to nestlings of different ages per day ($n=18$ nests).

Nest food provisioning and time-of-day effects

The provisioning rates of all prey items during 11 different hours of the day (07:00–18:00) did not vary ($F_{10,110}=0.78$, $p>0.05$). However, there were two early morning peaks of delivery (07:00–08:00 and 10:00–11:00) averaging 5.09 ± 0.6 food items/h, a mid-morning (11:00–12:00) peak of 5.45 ± 1.3 items/h and one afternoon (14:00–15:00) peak of 5.18 ± 0.7 items/h (Fig. 4). The mean delivery rates of insect larvae ($F_{10,152}=0.68$, $p>0.05$) and butterflies/ moths ($F_{10,152}=1.53$, $p>0.05$) during different hours of the day did not vary. However, mean delivery rates of grasshoppers for the time periods varied significantly ($F_{10,152}=2.203$, $p<0.05$). The provisioning rates by female ($F_{10,110}=1.09$, $p>0.05$) and male parents during the time periods did not vary ($F_{10,110}=1.68$, $p>0.05$).

Figure 4. Mean delivery rates of prey items during different hours of the day (n=18 nests).



Discussion

In tropical habitats that have less pronounced wet and dry seasons, factors that may influence breeding in birds include food availability, climate, and risk of nest predation (Gokula & Vijayan 2000). In insectivorous birds in particular, the type of prey and its abundance has been shown to be an important factor for the timing of reproduction (Garcia-Navas & Sanz 2011). In our study, insect larvae comprised the largest (51.9%) proportion of nestling diet. This was consistent with the findings of a study by Winterbottom & Wilson (1959) on the breeding behaviour of a Red-capped Lark population in Cape Town, and confirmed that caterpillars formed the highest proportion of nestling diet (45.7%) compared to other prey types (grasshoppers, moths, beetles). The importance of insect larvae has also been shown in another study on Red-capped Larks (Borrett & Wilson 1971) and numerous other studies of passerine species including Blue Tits *Cyanistes caeruleus* (50% of diet, Banbura *et al.* 1994), Black-throated Blue Warblers *Dendroica caerulescens* (60–87% of diet (Goodbred & Holmes 1996), Great Tit *Parus major* (44% of diet; Pagani-Nuñez *et al.* 2011), and Cerulean Warbler *Setophaga cerulea* (53% of diet; Auer *et al.* 2016). The provision of larvae (including caterpillars) can be attributed to a preference by parent birds to

provide soft-bodied prey to young nestlings because of their limited ability to digest hard-bodied prey that contains high amounts of chitin (Orłowski *et al.* 2015).

The quantity of food delivered to nestlings is influenced by the need to increase nestling survival (Oers *et al.* 2015), as well as to reduce predation, since nestlings that are not well fed are likely to beg more and attract predators in the process (Barati & McDonald 2017). This study revealed that the type and quantity of prey provided varied with nestling age, with provisioning rates increasing for nestlings aged 3–7 days old and decreasing for those 8–10 days old. Given that decreased food delivery reduces nestlings' survival (Mullers & Tinbergen 2009), increased provision of prey by parents may be attributed to the need by parents to increase chick survival during the crucial early days of their lives. Furthermore, the decline in provisioning rates towards the end of the nestling period may have been due to the need by parents to reduce the risk of being predated on while in or around the nest as well as to induce fledging (Adler & Ritchison 2011).

In our study time of day had an influence on food provisioning behaviour in Red-capped Larks. Provisioning rates were high in the morning and at mid-day, decreased in the afternoon, but increased again in the evening. This was likely because Red-capped Larks inhabit more open habitats where temperatures after mid-day may increase physiological stress on foraging adults because of heat load (Alonso *et al.* 2016) or depress insect activity to avoid unnecessary exposure to heat (Cao & Edery 2017).

Numerous avian reproduction studies have raised the question of whether parental care provided by male and female parent birds varies (Lormee *et al.* 2005, Ancona & Drummond 2013). In some species, the 'division of labour' hypothesis applies when each sex plays a different role in providing care (Morvai *et al.* 2016). In addition, investment by parents in socially monogamous birds may vary. There may be cases where great inequity in provisioning rates by the two sexes is evident (Palmerio & Massoni 2008), with male and female parents showing differences in provisioning behaviour (Mand *et al.* 2013). However, in some species, the investment may be more equitable. In our study, this was the case for the Red-capped Lark in relation to food provisioning with both parents actively providing this kind of care.

Study limitations and recommendations

Given that the study relied on direct field observations to identify prey items delivered by parents to nestlings, accurate identification of very small prey items, especially ants, was in some cases a challenge. Furthermore, the results of this study relied on data from one study area (Kedong area) over a period of only six months. Deeper insights into the diet and nest provisioning behavior of the Red-capped Lark in future studies may require more advanced and long-term studies such as the use of neck collars, faecal samples analysis, and video recordings.

Conservation implications

The findings of this study confirmed that insects, especially larvae and caterpillars, are very critical for the survival and reproductive success of the Red-capped Lark. Open grassland not only offers a habitat for the bird, but also harbours its insect prey species. The grassland habitat of birds at Kedong Ranch and elsewhere in Kenya is under pressure from intensified anthropogenic activities and should be protected from further degradation. With habitats of many tropical birds becoming threatened and increasingly fragmented, resulting in a huge loss of biodiversity, there is great need to integrate the findings of this study in a comprehensive biodiversity conservation management plan for Kedong Ranch and in similar plans for grassland species

elsewhere. This will safeguard insect food resources for the Red-capped Lark and other grassland birds to ensure their long-term conservation.

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Mary Mwangi

African Conservation Centre (ACC), P.O. Box 15289-00509, Nairobi, Kenya
Email: mwangimary15@gmail.com or mary.mwangi@acc.or.ke

Peter Njoroge

Zoology Department, National Museums of Kenya, P.O. Box 40658-00100, Nairobi Kenya
Email: pnjoroge@museums.or.ke

Robert Chira

School of Biological Sciences, University of Nairobi, P.O. Box 30197, GPO, Nairobi, Kenya
Email: rchira@uonbi.ac.ke

Nathan Gichuki

School of Biological Sciences, University of Nairobi, P.O. Box 30197, GPO, Nairobi, Kenya
Email: ngichuki@uonbi.ac.ke

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Short communications

On birds and bees

It is perceived anecdotal wisdom in rural Africa that unprovoked attacks by honey bees *Apis mellifera scutellata* are not uncommon. Apiarists are also aware that a sting is accompanied by the release of alarm pheromones to which other bees respond by stinging—often close to the original sting site. The release of more pheromones can stimulate a chain reaction ‘mass attack’. If the victim is unable to escape, lethal results are known, not only for humans, but for cattle, dogs and other animals. Yet what stimulates the first bee to place a sting that starts such a chain reaction? Here I record three instances where birds stimulated bee attacks on nearby people and animals.

A pair of White-eyed Slaty Flycatchers *Melaenornis fischeri*, habituated to human presence, were the core of a group that varied between two and seven (presumably offspring of one or more generations) over a period of 18 yr. Extreme tameness made the pair recognizable, the rest of the group were also very tame from being regularly fed meal worms *Tenebrio* sp. These birds associated as a loose party in which distances between individuals might be 5 m or more.

My hives were kept in a thicket to limit the bees’ ability to see human and animal movement and prevent people from approaching them too closely. On two evenings separated by several years, I was standing close to a hive observing the bees when ‘my’ slatys’ raided it. The flycatchers approached, one at a time through a succession of perches, each getting closer, the last c. 1 m from the hive. From this perch a bird darted out, seized a bee as it landed at the hive entrance and disappeared into the surrounding thicket. More than one bird was involved. The raids were repeated at intervals of initially around 5 min, each making the bees progressively more disturbed. After several attacks, the hive was aroused and a posse of bees pursued each escaping raider into the thicket and out of my sight. Subjectively the periods between dashes to snatch a bee became longer before, on both occasions, the bees, seeing movement, fell upon my nearby dogs and then myself and we fled.

On another occasion while handling cattle under some tall *Eucalyptus* trees, I was aware of a commotion in foliage high above us. A European Honey Buzzard *Pernis ptilorhynchus* flew out of it followed by a train of bees. These had attached their combs to the underside of a branch—an unusual but not unknown departure from placing their hives in hollows. About 15 min later, presumably the same bird flew through the foliage: there was much flapping, and the commotion was repeated briefly before the bird fled with a large piece of comb in its talons, again pursued by many bees. Within the following half hour, this performance was repeated. Shortly after this third attack bees descended en masse, sending people and animals below fleeing.

In these three cases the bees’ victims were spread over relatively wide areas (in the case of the Honey Buzzard they were distributed over an area of 100 m in diameter). In the first instance none was identified by a sting-released alarm pheromone emanating from them. Many were widely separated—men, women, children, chickens, dogs and cattle—and had been initially targeted by an individual ‘angry’ bee. Many were subsequently stung again by bees presumably guided by pheromones released from the first sting. From the victims’ point of view (excluding myself), these bee attacks had been unprovoked.

All bees do not need the stimulus of a pheromone to sting. Abrupt movement within 2m (sometimes more) of a hive entrance will often be sufficient stimulus for a guard bee to sally out and sting the mover. Presumably given their roles in hive defence, such guard bees have an intrinsically lower behavioural threshold for alarm than those employed in other spheres, such as foraging. Yet as many an apiarist has learned, upon an inadvertent loud bang or blow upon their hive, calm bees can attack en masse. Ergo, all bees can be stimulated to attack any animals in the vicinity of their hives in a seemingly directionless manner, and without the guidance of a pheromone. All it needs is a sudden disturbance. I posit that this was what the birds I observed had provided and many 'unprovoked' bee attacks probably have similar origins. Claims that African bees are particularly fierce is overwhelmingly anecdotal, but sufficiently widespread to have substance and suggest that *Apis mellifera scutelata* has a lower alarm threshold than other honey bee races.

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Ian Parker

P.O. Box 1115, Tolga, Qld 4882, Australia

Email: ipap@activ8.net.au

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Desert Wheatear *Oenanthe deserti* at Lake Turkana – the fourth record of the species for Kenya

The Desert Wheatear *Oenanthe deserti* is a Palearctic species that winters in northern Africa from Mauritania east to Ethiopia and south to 1°N in South Sudan (Lewis & Pomeroy 1989). It is a vagrant in Kenya, with only three previous records: two individuals on 17 February 1984 at Kiunga, and one on 18 October 1996 in the Kerio Valley (Bird Committee, EANHS 2009); and one adult male in Nairobi National Park on 17 November 2016 (Fisher & Hunter 2018).

On 8 February 2018 while on an ornithological survey at the Lake Turkana Wind Power site, we observed a Desert Wheatear about 500 m outside the staff village (2°29'02.4" N, 36°50'13.2" E; 743 m) in an area of scattered shrubs on barren rocky soil with sparse tussock-like grass. The bird struck us as a little odd compared to the Isabelline Wheatears *O. isabellina* and Pied Wheatears *O. pleschanka* we had been observing at the site. We quickly took a few photographs before the bird flew off; and on reviewing them it was clearly an adult female Desert Wheatear. The bird had a completely black tail that was only white at the base and under-tail coverts, immediately suggesting a Desert Wheatear. Additionally, the scapulars were noticeably pale (giving them a silvery appearance) and the face was rather plain with a very indistinct superciliary stripe. These three features ruled out all other wheatears that occur in Kenya and left us in no doubt that this was indeed the fourth record of Desert Wheatear for the country.

Although considered a vagrant in Kenya, this species might be a more regular (though scarce) visitor to the arid areas of the northern and eastern border areas and might pass unnoticed because of the absence of observers. In recent years insecurity has long been a major factor contributing to the under-exploration of northern and eastern Kenya. The avifauna of these areas is less well known compared with the rest of the country.



Figure 1. Adult female Desert Wheatear *Oenanthe deserti* at the Lake Turkana Wind Power site, 8 February 2018 (photo: Sidney Shema).

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Sidney Shema and Peter Njoroge

National Museums of Kenya, Ornithology Section, P.O. Box 40658-00100, Nairobi, Kenya
 Author for correspondence: sidneyshema@gmail.com

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A new record of the Pied Flycatcher *Ficedula hypoleuca* from Kakamega Forest, western Kenya

The Pied Flycatcher *Ficedula hypoleuca*, along with congeners, the Semi-collared *F. semitorquata* and Collared *F. albicollis* Flycatchers, comprise three very similar black-and-white migratory passerines that breed in the Palaearctic and winter in sub-Saharan Africa. Historically, both the Semi-collared and Collared Flycatchers have occurred in Kenya (Urban *et al.* 1997, Zimmerman *et al.* 1996), with the Pied Flycatcher having a confused history. It was first collected on 8 December 1965 at Kakamega Forest, but not formally accepted as such by the East African Rarities Committee (EARC) until the 1990s (Pearson 1998). Only one subsequent accepted record of Pied Flycatcher is known from Kenya, that of two birds seen on 26 February 2002, also at Kakamega Forest (B. de Bruijn, pers. comm.; N. Hunter, pers. comm.). The difficulties of identifying members of this group to species level on the wintering grounds, especially without in-hand analysis required to assign some individuals (Pearson 1998), complicates assessment of their true status in Kenya. On 29 March 2017 we encountered two *Ficedula* flycatchers in the Kenya Forest Service compound at Kakamega Forest (0°14.126N, 34°51.919E), which we identified in the field as Pied Flycatchers, and which we detail here to assist in gaining a better understanding of this species' status in East Africa.

The first bird sighted was found at approximately 07:00 and observed initially at a distance of c. 20 m foraging in the lower to mid-canopy of a leafy tree in the corner of the compound for a period of around 5 min. It was identified as an adult male and was seen repeatedly throughout the day on 29 March, and again until noon on 30 March (when we left the area), allowing us and other observers (A. Scott-Kennedy, T. Davis, B. Obanda and A. Kilpin) the opportunity to study the bird closely and obtain photographs. The second bird was found at 12:30 on 29 March but was higher in the mid-storey of a taller tree than the earlier bird, was more skittish, and was seen well several times, but only briefly. It was thought to be either an adult female or a more grey-toned male, but no photographs were obtained. Both birds were quite active, ranging from the lower mid-storey to sub-canopy of several medium-sized trees, and it seemed that the first bird was defending a roughly 75 x 50 m area of the compound from the second bird, where it also foraged from man-made structures.

We identified the first bird as a Pied Flycatcher based on several characteristics visible in the field. Most notable was the absence of a white collar, immediately ruling out Collared Flycatcher, instead showing only a small incursion of white along the lower border of the auricular, which barely extended behind the level of the eye at rest. Several other features consistent with Pied Flycatcher, but anomalous for Semi-collared or Collared, were noted. These



Figure 1. Male Pied Flycatcher at Kakamega Forest, 30 March 2017 (photo: A. Kilpin).

included uniformly dark median coverts (pale-tipped forming an upper-wing bar in Semi-collared, e.g. see Mullarney *et al.* 1999), as well as only a very limited white patch at the base of the primaries, which did not extend beyond the tip of the longest primary covert on the closed wing and which did not reach the outer edge of the wing (*contra* Semi-collared Flycatcher). The white forehead patch was relatively small and bisected down the middle (in line with the culmen edge) by black, resulting in two small patches (one on each side of the head). At rest, only a limited amount of white was visible in the outer rectrices of the closed tail, which is also consistent with Pied Flycatcher. A photograph taken by Alistair Kilpin illustrates many of these features (see Fig. 1). Photographs also revealed that many wing feathers (primaries, secondaries, and many coverts) were contrastingly duller than the black on the rest of the upperparts, a field mark mentioned for Pied Flycatcher (e.g. Mullarney *et al.* 1999), though we do not know to what extent this may be influenced by moult timing or age. Many of the same relevant field marks were noted on the second individual, notably the lack of a median covert wing bar and minimal white at the base of the inner primaries, though the upper parts appeared a greyish-brown instead of black. Both birds remained silent during our observations.

Based on these records, and those from Kakamega in early December 1965 and late February 2002, it is plausible that the Pied Flycatcher may occur more regularly in Kenya than previously recognized and could lead to a finding that the species occurs in western Kenya principally as a rare spring passage migrant. Previous records may have gone undocumented due to misidentifications based on assumptions of range and owing to the difficult identification challenge this group presents. In order to accurately ascertain the status of Pied Flycatcher and congeners in East Africa, we strongly encourage observers to scrutinize and carefully document any *Ficedula* flycatcher they see in the region. Our records described herein, plus additional photographs, were submitted to the EARC and have been accepted by them as the third and fourth records of Pied Flycatcher in Kenya (Fisher & Hunter 2018).

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Nathan Hentze

4016 Grange Rd., Victoria, British Columbia, Canada, V8Z 4V3. Email: nathan.hentze@gmail.com

James Bradley

7961 East Saanich Rd., Saanichton, British Columbia, Canada, V8M 1T4. Email: james_bradley@gmail.com

Red-necked Falcons *Falco chicquera* hunting at a roost of African Palm Swifts *Cypsiurus parvus*

The Red-necked Falcon *Falco chicquera ruficollis* is a medium-sized falcon that is found in large parts of eastern and southern Africa and from Somalia west into Senegambia along the sub-Sahel region (Ferguson-Lees & Christie 2001). It favours open grasslands, marshes, *dambos* (wetland) and floodplains where it is most often associated with *Borassus* and *Hyphane* palm trees (Kemp 1994, Osborne 1981, Dowsett-Lemaire & Dowsett 2006), but also with dry thorn tree savanna with isolated palms (Colebrook-Robjent & Osborne 1974). Throughout its range, the Red-necked Falcon mainly hunts birds, and to a lesser extent bats, rodents, reptiles and insects (Brown & Amadon 1968, Osborne 1981, Maclean 1985, Kemp 1994). Because of its association with palm trees, the Red-necked Falcon lives in close proximity to another African bird species that is associated with palm trees, the African Palm Swift *Cypsiurus parvus* (Moreau 1941, Fry *et al.* 1988, Chantler 1999, Dowsett-Lemaire & Dowsett 2006). Despite this, interactions between both species, that are bound to occur, have not been described in detail.

On 18 July 2013, at around 17:30, I observed a pair of Red-necked Falcons perching in a tree top in the town of Nsanje (formerly known as Port Herald, 16°56'S, 35°16'E), southern Malawi. I had seen the falcons making hunting sorties from that same tree-top around dawn and sunset on previous occasions that month, but I was unable to see what prey they were hunting. The falcons were situated 30 m from a large *Borassus aethiopum* palm tree where approximately 30 African Palm Swifts were gathering at dusk. The swifts gathered to roost in between the palm leaves but seemed hesitant to enter the roost. Instead, they circled the area, calling and showing signs of agitation. The male Red-necked Falcon attacked the swarming swifts from his perch in a fast level flight, but this did not result in a catch. The swifts scattered and both falcons moved on.

Both falcons returned to their perch the following morning at 06:00. The male was plucking and eating a small passerine bird, while the female was making begging calls. Eventually the female took the half-eaten prey from the male's talons and finished it. Around the base of the tree I found some prey remains that were dropped by the falcons. These consisted of feathers and bills belonging to a male House Sparrow *Passer domesticus* and a Cut-throat Finch *Amadina fasciata*, and a couple of primary feathers of an African Palm Swift.

I conducted a search using Google Scholar with keywords *Falco chicquera/ruficollis*, *Cypsiurus parvus*, and consulted the online tables of contents of African ornithological journals (*Bulletin of the African Bird Club*, *Gabar*, *Scopus*, *Malimbus* and *Ostrich*). It seems that African Palm Swift has not previously been recorded as a prey species of Red-necked Falcon. The same applies to the Cut-throat Finch. However, information on prey composition in Africa is scarce. Osborne (1981) is one of the few sources with a substantial list of prey species ($n=292$). He noted at least 13 identified bird species taken in Zambia, as well as a number of undetermined bird, mammal and insect species. African Palm Swift and other swift species were not recorded in his account. Cade (1982) mentions 'swifts', as a food source for the Red-necked Falcon but does not specify any species. Bijlsma *et al.* (1994) observed Red-necked Falcons attacking a large roost of Barn Swallows *Hirundo rustica* in Botswana. A pair managed to catch a Barn Swallow on a cooperative hunt in twilight. These crepuscular hunting habits seem to be normal in Red-necked Falcons outside the breeding season (Brown

& Amadon 1986). This behaviour is also described for the nominate race (*Falco c. chiquera*), sometimes called Red-headed Falcon, that occurs from south-eastern Iran, east to Bangladesh (Naoroji 2011). Besides birds gathering to roost, both races also attack emerging bats (Fry 1964, Hanmer 1984, Foysal 2015). Hanmer 1984 describes how Red-necked Falcons attacked emerging bats at Nchalo, Malawi with fast horizontal attacks from an elevated perch. A method very similar to the one I described above.

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André de Baerdemaeker

Natural History Museum Rotterdam, Westzeedijk 345, 3015 AA Rotterdam, The Netherlands

Email: debaerdemaeker@hetnatuurhistorisch.nl

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A breeding record of the Silvery-cheeked Hornbill *Bycanistes brevis* in central Kenya

The Silvery-cheeked Hornbill *Bycanistes brevis* has a range extending from Eritrea to South Africa (Lewis & Pomeroy 1998) and is considered a species of Least Concern (BirdLife International 2017). It is a locally common bird inhabiting highland forests, woodlands and gardens of central and coastal Tanzania and eastern Kenya (Stevenson & Fanshawe 2002). Although conspicuous in nature, there is only one documented breeding record of the species in Kenya, from Molo town in Nakuru County in October 1978 (Lewis & Pomeroy 1998) and this record is not considered very accurate (Lewis 1994). Given the lack of subsequent nesting records for this species in Kenya, we share some observations of a male Silvery-cheeked Hornbill recently observed delivering food to an active nest in east-central Kenya.

Field Observations

MW first reported the nest site on 12 October 2017 at 1970 m on Nyeri Hill (0°24'S, 36°54'E) while birding near Mathari Hospital. He observed a male hornbill collecting foodstuffs, which led him to the nesting site. The nest was approximately 3.5 m above the ground in a cavity of a 20-m tall *Albizia* sp. less than 15 m from a moderately busy tarmacked road in a lightly wooded agricultural area. The cavity entrance was approximately 20 cm in diameter and was positioned where a limb had once branched from the trunk. The feeding slit extended the vertical length of the fully mud-plastered hole, measuring approximately 4 to 6 cm at its widest point. The male was photographed passing food through the feeding slit to his walled-in mate. On 12 November 2017 at 15:30, DG, SC and BM made an additional observation of the nest site. During this observation, a male hornbill appeared at the nest within 5 min and began regurgitating small, round food items and placing his bill into the nest opening. This behaviour continued every 10 to 20 s over the following 2 to 3 min before the bird flew off over the farmland. The male made no vocalizations while perched on top of the nesting cavity. Because of the background noise in the vicinity, the observers couldn't be sure whether the nest contained young or only a female, and the male was not seen again.

MW made a subsequent visit on 22 November 2017 and the male was observed bringing food back to the nest and passing it through the mud slit. MW also reported hearing young inside the cavity begging for food. MW last visited the site on 13 February 2018. The walled entrance to the cavity was missing and the nest was empty.

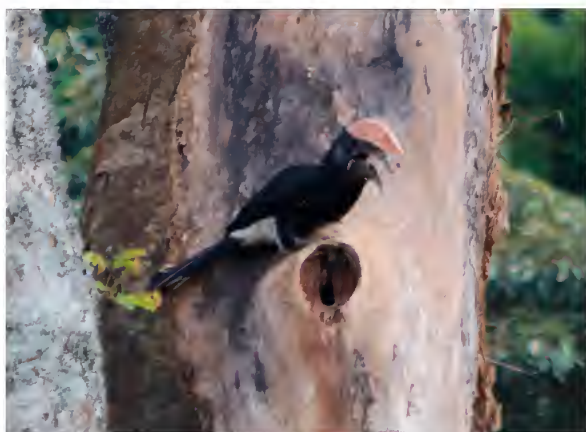


Figure 1. Male Silvery-cheeked Hornbill *Bycanistes brevis* regurgitating food above the nesting cavity, Nyeri Hill, 12 November 2017 (photo: D. Guarnieri).

Discussion

In a study of Silvery-cheeked Hornbills from the East Usambara Mountains in Tanzania, females usually entered the nest and laid eggs in October and emerged between 107 and 120 days later with fledged young (Moreau &

Moreau 1941). Based on the dates of our observations in Nyeri, we believe the female was walled in and laid eggs in late September or early October. During the forty-day incubation period for the eggs (Moreau & Moreau 1941), the male was probably feeding the female in October and later the offspring in November. We would estimate the female exiting the cavity with fledged young in late January or early February 2018. This also fits well with the timing of the Molo breeding record with the birds nesting in October and departing before March.

Lewis (1994) puts forward a number of theories to explain the lack of breeding records in Kenya for this species: 1) the birds are extremely secretive in their breeding habits, 2) they breed in little known areas of Kenya, 3) they migrate out of the country to breed or, 4) the birds breed in Kenya, but no one reports this behaviour. Our observations suggest that Silvery-cheeked Hornbills are not necessarily secretive nesters. Despite their size, suitably large trees can be found within forested and lightly wooded areas across its range in central Kenya, so lack of suitable nesting sites would not explain the overall paucity of records, historical as well as recent. Given the number of active observers over this range, we think it is reasonable to conclude that breeding is a relatively rare occurrence in Kenya.

Exactly why this is the case remains unclear. The only reported successful nesting sites are from the wettest parts of the Central highlands, Molo and Nyeri, which is consistent with a possible climatic explanation for the lack of records. If successful breeding requires consistently wet conditions over a period of at least three months, from the time that nest-building material becomes available until the young are fully fledged, even these reported sites in Central Kenya must be somewhat marginal. A comparison of rainfall records for a larger data set that includes further confirmed nesting sites in both Tanzania and Kenya would be a useful next step towards shedding light on this curious phenomenon.

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David P. Guarnieri

91 Lake Avenue, Metuchen, NJ 08840, USA. Email: doguarnieri@mac.com

Marto Wanjohi

P.O. Box 898-10400 Nanyuki, Kenya. Email: martowanjohi71@gmail.com

Simon Carter

202 Edgemore St. South, Hamilton, Ontario, L8K 2H9 Canada. Email: simonchiz@gmail.com

Benson Mugambi

C/o Ben's Ecological Safari. P.O. Box 5898-00100 Nairobi, Kenya.
Email: ben@benscologicalsafaris.com

James Bradley

10296 Sparling Pl., Sidney, British Columbia, V8L 0C8 Canada. Email: jalopyjamo@gmail.com

East African Rarities Committee Report for 2017

David Fisher (Chairman) and Nigel Hunter (Secretary) on behalf of the EARC

The East African Rarities Committee assesses records of new and very rare birds occurring in Kenya, Tanzania, Uganda, Rwanda and Burundi. This includes up to the fifth record of any species from each of the five countries. Sightings of species for which there are fewer than five records for a country should be submitted to the EARC Secretary, Nigel Hunter, P.O. Box 24803, Karen 00502, Nairobi, Kenya; Email: nigelhunter@timbale.org. Please contact the Secretary to obtain clarification of whether a record requires a submission and for guidance on what details to include in the submission. Past records of rare species are also sought in order to bring the EARC database up to date. Nomenclature follows the *Checklist of the Birds of Kenya* 4th edition (Bird Committee 2009) unless stated otherwise.

Since the Committee's last report published in 2017 (*Scopus* 37(2): 46–48) the following records have been accepted:

Eurasian Bittern *Botaurus stellaris*

Second record for Kenya. One was seen and well photographed in Amboseli National Park on 28 November 2016 (W. Ole Kasaine; Fig. 1). This species is sometimes called the Great Bittern, or just Bittern but del Hoyo & Collar (2014), Dickinson & Remsen (2013) and Gill & Donsker (2018) all call it the Eurasian Bittern. The first Kenya record was from Lake Baringo on 22 December 1994 (Fisher & Hunter 2014).



Figure 1. Eurasian Bittern *Botaurus stellaris* (photo: W. Ole Kasaine).



Figure 2. Black Kite *Milvus m. migrans* x *M. m. lineatus* intergrade (photo: A. Scott Kennedy).

Black Kite *Milvus m. migrans* x *M. migrans lineatus* intergrade ('Eastern Black Kite')

First, second and third records for Kenya. The first one was seen and photographed over Nairobi National Park on 8 January 2017 (B. Finch). The second was seen and photographed over Mara Conservancy (Maasai Mara) on 13 March 2017, and the third over Oloololo Escarpment (Angama Mara) on 14 March 2017 (A. Scott Kennedy). These three records were reviewed and accepted by Dick Forsman, an independent expert familiar with this 'intergrade' and its recent expansion into Africa.

Oriental Honey Buzzard *Pernis ptilorhynchus*

First record for Tanzania and second for the East African region. One was seen and photographed in flight over Arusha National Park on 10 April 2017 (T.A. Gous; Fig. 3). The report was reviewed and accepted by Dick Forsman, an independent expert familiar with this species. [Crested Honey Buzzard is the Gill & Donsker (2018) name whereas Dickinson & Remsen (2013) and del Hoyo & Collar (2014) call it the Oriental Honey Buzzard.]



Figure 3. Oriental Honey Buzzard *Pernis ptilorhynchus* (photos: Tertius Gous).

Heuglin's Courser *Rhinoptilus cinctus*

Third record for Uganda. Two birds were observed 25 km north of Moroto Town on 4 September 2011, with a description provided (R. Skeen and M. Opige).

Pallas's Gull *Larus ichthyaetus*

Second record for Uganda. A single bird was observed and photographed at Lake Munyanyange, Queen Elizabeth National Park on 18 January 2017 (R. Skeen). [Called *Ichthyaetus ichthyaetus* by both Dickinson & Remsen (2013) and Gill & Donsker (2018); Dickinson & Remsen (2013) give the name Great Black-headed Gull as an alternative. del Hoyo & Collar (2014) call it *Larus ichthyaetus*.]

Thick-billed Cuckoo *Pachycoccyx audeberti*

Third and fourth records for Uganda. The third record was one observed and photographed at the Ziwa Rhino Sanctuary on 1 February 2015 (C. Wanyama and Dr M. Zieger). The fourth record was one observed (and its distinctive call heard) and photographed in the vicinity of Katuuso Primary School, Mpigi on several occasions between February and May 2017 (S. Clark).

Black-collared Barbet *Lybius torquatus*

Fourth record for Uganda. Two birds were observed and photographed at Lake Mburu National Park on 17 January 2017 (R. Skeen, J. Mirembe and M. Matisiko).

Southern Black Tit *Melaniparus niger*

New for Tanzania. A detailed submission with photographs taken in September 2016 demonstrates conclusively that this species does occur in southeast Tanzania and that good records of this species have been wrongly assigned to White-winged Black Tit *M. leucomelas* (N.E. Baker and the late E.M. Baker).

Black-eared Wheatear *Oenanthe hispanica*

Fourth record for Kenya. Adult male observed and photographed in Tsavo West National Park on 6 January 2011 (W. Ole Kasaine).

Desert Wheatear *Oenanthe deserti*

Third record for Kenya. Adult male in winter plumage observed in Nairobi National Park on 17 November 2016. Description provided (B. Finch, N. Hunter and J. James).

Pied Flycatcher *Ficedula hypoleuca*

Third and fourth records for Kenya. Two separate birds were observed at the same location in the Kenya Forest Service Compound at Kakamega Forest on 29 and 30 March 2017. A detailed description and several photographs were provided (J. Bradley, N. Hentze and A. Kilpin; Fig. 4; *Scopus* 32(2): 19–20).



Figure 4. Pied Flycatcher *Ficedula hypoleuca* (photo: A. Kilpin).



Figure 5. Striped Pipit *Anthus lineiventris* (photo: S. Clark).

Shining Sunbird *Cinnyris habessinicus*

Third record for Uganda. A male was observed 20 km north of Moroto Town on 4 September 2011, with a description provided (R. Skeen and M. Opige).

Bush Petronia *Petronia dentata*

Fourth record for Uganda. A female observed and photographed at Kidepo National Park on 23 July 2017 (D. Hoddinott).

Cut-throat Finch *Amadina fasciata*

Second, third and fourth records for Uganda. The second record involved two males and one female at Kidepo National Park on 25 April 2011 (R. and J. Skeen). The third record involved one male and two females at Irriri, Karamoja on 24 October 2011 (R. Skeen and M. Opige). The fourth record was a sighting of some 20 birds including males at Kidepo National Park on 23 July 2017 (D. Hoddinott). All three records included good descriptions.

Eastern Paradise Whydah *Vidua paradisaea*

Third record for Rwanda but with an earlier date than the two records included in our previous report. This record is of three birds, including one photographed male, which were observed at Mashoza Forest Patch, Ngoma District on 11 January 2014 (A. Yates, T. Majanen and C. Nsabagasani).

Steel-blue Whydah *Vidua hypocherina*

Second and third record for Uganda. The second record was one observed 20 km north of Moroto Town on 5 September 2011, with a description provided (R. Skeen and M. Opige). The third record was one observed and photographed south of Kaa-bong on 24 July 2017 (D. Hoddinott).

Striped Pipit *Anthus lineiventris*

First and second record for Uganda. The first was of two birds observed and photographed at Mihingo Lodge, in western Uganda on 13 November 2016 (S. Clark). The second record was a single bird observed and photographed at Rwakobo Rock Lodge, in western Uganda on 8 May 2017 (Fig. 5, S. Clark).

Southern Citril *Crithagra hyposticta*

New for Uganda. Up to eight birds were observed and photographed at Sipi River Lodge, Mount Elgon on 7 January 2017 and a further pair observed at the Research Centre, Mount Elgon National Park on 8 January 2017. Good descriptive features distinguishing this species from the Western Citril *C. frontalis* were provided (S. Clark). Subsequent to this record, three further records (R. Skeen), including photographs, from the same Sipi Falls area of Mount Elgon, with earlier dates of 4–6 April 2010, 19–20 April 2014 and 3–5 October 2015, were submitted and accepted.

Ortolan Bunting *Emberiza hortulana*

First record for Tanzania. Observed and photographed at Seronera Wildlife Lodge, Serengeti on 12 October 2012 (T. Stevenson).

The following records were Rejected because the details provided were insufficient to establish the identification with certainty:

Striped Crake *Aenigmatolimnas marginalis* at Doho Rice Scheme, Mbale, Uganda on 12 January 2011.

Dunlin *Calidris alpina* at Lutembe Lagoon, Lake Victoria, Uganda on 31 October 2009.

Thick-billed Cuckoo *Pachycoccyx audeberti* in Murchison Falls National Park, Uganda on 31 January 2014.

Tiny Cisticola *Cisticola nanus* in Kidepo National Park, Uganda on 23/24 July 2017.

Pied Flycatcher *Ficedula hypoleuca* at South Nandi Forest, Kenya on 29/30 March 2017.

Cameroon Indigobird *Vidua camerunensis* near Ishasha, Queen Elizabeth National Park, Uganda on 21 December 2016. [This is the English name used by Gill & Donsker (2018) and del Hoyo & Collar (2016), although Dickinson & Remsen (2013) use Fonio Indigobird as their first preference, with Cameroon Indigobird as an alternative.]

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David Fisher

56 Western Way, Sandy, Bedfordshire, SG19 1DU, United Kingdom; Email: david@sunbirdtours.co.uk

Nigel Hunter

P.O. Box 24803, Karen 00502, Nairobi, Kenya; Email: nigelhunter@timbale.org

Letter to the Editor

Checklist confusion

As all readers will surely know, there is much confusion these days about the names birds are given — both English and scientific — and the order in which they are listed (e.g., Turner 2018). There are four ‘competing’ lists: Howard & Moore (Dickinson & Remsen 2013, Dickinson & Christidis 2014), Clements (Clements *et al.* 2017), the IOC World Bird List (Gill & Donsker 2018), and the HBW-BirdLife illustrated checklist (del Hoyo & Collar 2014, 2016). A useful account of the situation and an explanation of why the lists vary in the way they do is given by Collar (2018).

We suspect that most people believe that the IOC list has the authority of the International Ornithological Congress behind it, and that ‘IOC’ stands for that body. The purpose of this letter is to clarify the current meaning of ‘IOC’ in the list’s title. ‘IOC’ originally referred to the International Ornithological Congress; this body initiated the process of creating a list of English names of the world’s birds, headed by Frank Gill who, with colleagues, first published the IOC list in 2006 (Gill & Wright 2006) in book form. Soon after it became available on line as an Excel file. The printed version is no longer available but online versions continue to appear twice a year, the latest being http://www.worldbirdnames.org/master_ioc_list_v8.2.xlsx of June 2018.

The first sentence under the Home and Welcome headings of the IOC World Bird List website is, “The IOC World Bird List is an open access resource of the international community of ornithologists.” In other words, ‘IOC’ should really be ‘ioc’ since the ‘international community of ornithologists’ has no right to capital letter status!

The IOC has now become the IOU, the International Ornithological Union, and the IOU makes clear in its website that it takes no position in supporting *any* list, and that, specifically, the *IOC World Bird List* is not under the Union’s authority. However, it is sponsoring a round table discussion at the 27th International Ornithological

Congress (IOCongress 2018), 19–26 August, in Vancouver, “chaired by Frank Gill and Les Christidis, towards unification that will consolidate a checklist that the IOU can support. In the interim, the Union is using the current web-based version of the IOC World Bird List for the bird names in its publications.” (IOU 2018).

We hope that these discussions will be fruitful, and although it is surely expecting too much that agreement will be achieved, at least it is a start in tackling the confusion that reigns at present.

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Graeme C. Backhurst

2 Reeds Cottages, Windmill Lane, Faversham, Kent ME13 7GT, UK
Email: graeme.backhurst@gmail.com

Donald A. Turner

P.O. Box 1651, Naivasha 20117, Kenya
Email: don@originsafaris.info

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The text must be written in (British) English following the preferred (first) spelling of

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Units: Metric units and their SI equivalents and abbreviations should be used. The

abbreviation should be preceded by a space, '5 km' not '5km'. Latitudes and longitudes in degrees and minutes, not decimal degrees.

Dates: 21 February 2001 [note the order, no comma, not 21st].

Time of day: 13:00 [note colon, no 'hours', 'hrs' or 'h'; 'h' is a unit of time, not of time of day].

Names of birds: For example, Olive Thrush *Turdus olivaceus* [no comma, no parentheses, no author's name or date (unless pertinent to a point in the text)].

References cited in the text: Cite multiple references in chronological order, separated by commas, e.g. (Njoroge & Lounsbury 1998, Mlingwa *et al.* 2001) [note ampersand, italicized '*et al.*', no comma between authors' names and date].

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Stuart, S.N., Jensen, F.P., Brøgger-Jensen, S. & Miller, R.I. 1993. The zoogeography of the montane forest avifauna of eastern Tanzania pp. 203–228 in Lovett, J.C. & Wasser, S.K. (eds) *Biogeography and ecology of the rainforests of Eastern Africa*. Cambridge: Cambridge University Press.

Urban, E.K., Fry, C.H. & Keith, S. (eds) 1986. *The birds of Africa*. Vol. 2. London: Academic Press.

BirdLife International 2013. Species factsheet: *Balearica regulorum*. Downloaded from <http://www.birdlife.org> on 14/05/2013.

Both English and scientific names of birds should be given when the species is first mentioned — in the title and in the text — thereafter only one name should be used but both English and scientific names should be given in captions to figures.

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THE EAST AFRICA NATURAL HISTORY SOCIETY

Nature Kenya, P.O. Box 44486,
00100, Nairobi, Kenya; tel. +254 (0)
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